

Please amend claims 8, 11-13, 16-17 and 20 as follows:

8. (amended) An apparatus for processing a semiconductor provided on a substrate comprising:

[an irradiation apparatus for irradiating a light to said semiconductor therein;  
a vacuum apparatus for a vacuum processing]

a film formation apparatus provided for forming an amorphous silicon film on a substrate by a chemical vapor deposition method in said chamber;

a laser processing apparatus for irradiating said silicon film with a laser light for crystallizing said silicon film after forming said amorphous silicon film;

a preliminary chamber interposed between said film formation chamber and said laser processing chamber, and

a mechanism for transporting said substrate from said [vacuum apparatus to said irradiation apparatus] film formation apparatus to said laser processing apparatus through said preliminary chamber without exposing said substrate to outside air.

11. (amended) The apparatus of claim 8 wherein said [vacuum apparatus] film formation apparatus is a plasma CVD apparatus, (a sputtering apparatus), a thermal CVD apparatus, or a (vacuum evaporation) apparatus[, a plasma doping apparatus, an ion implantation apparatus, a thermal diffusion apparatus, a thermal crystallization apparatus or an etching apparatus].

12. (amended) The apparatus of claim 8 [further comprising a laser for emitting a laser light wherein the emitted laser light is introduced into said irradiation apparatus through a window provided in a wall of said irradiation apparatus] wherein said laser processing apparatus comprises a chamber and a laser placed outside said chamber, said chamber having a window through which a line-shaped laser beam having an elongated cross section is introduced into said chamber.

B2 13. (amended) The apparatus of claim [8] 12 wherein [said irradiation] the chamber of said laser processing apparatus [comprises] is provided with a holder for holding said substrate [therein], and [said holder can be moved relative to said light] provided with a mechanism for moving said substrate in a direction orthogonal to the elongation direction of said laser beam in order that a whole surface of said substrate is scanned with said laser beam.

16. (amended) An apparatus for processing a semiconductor provided on a substrate comprising:

a preliminary chamber;

[a light processing apparatus connected with said preliminary chamber;]

an ion introducing apparatus connected with said preliminary chamber for doping a semiconductor layer formed on a substrate with a dopant impurity;

[an etching apparatus connected with said preliminary chamber]

B3 a laser processing apparatus connected to said ion introducing apparatus through said preliminary chamber for treating said semiconductor layer with a laser light after said doping.

wherein said preliminary chamber is provided with a mechanism for transporting said substrate from said ion introducing apparatus to said laser processing apparatus without exposing said substrate to the air.

17. (amended) The apparatus of claim 16 wherein said [light] laser processing apparatus [is a laser processing apparatus] comprises a chamber and a laser placed outside said chamber, said chamber having a window through which a line-shaped laser beam having an elongated cross section is introduced into said chamber.

T4) B4 3 20. (amended) The apparatus of claim <sup>2</sup>17 [16 further comprising a magic hand

for transporting said substrate into said preliminary chamber, said light processing apparatus, said ion introducing apparatus, and said etching apparatus] wherein the chamber of said laser processing apparatus is provided with a mechanism for moving said substrate in a direction orthogonal to the elongation direction of said laser beam in order that a whole surface of said substrate is scanned with said laser beam.

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Please add the new claims 21-25 as follows:

-21. A laser processing apparatus comprising:

an ion doping apparatus for doping a semiconductor layer formed on a substrate with a dopant impurity;

a first preliminary chamber connected to said ion doping apparatus;

an etching apparatus connected to said ion doping apparatus through said first preliminary chamber for carrying out a plasma etching on a surface of said semiconductor layer after said doping;

a second preliminary chamber connected to said etching apparatus;

a laser processing apparatus connected to said etching apparatus through said second preliminary chamber for treating said semiconductor layer with a laser light after said plasma etching,

wherein said first and second preliminary chambers are provided with a mechanism for transporting said substrate from said ion doping apparatus to said etching apparatus and from said etching apparatus to said laser processing apparatus, respectively.

22. The apparatus of claim 21 wherein said laser processing apparatus comprises a chamber and a laser placed outside said chamber, said chamber having a window through which a line-shaped laser beam having an elongated cross section is introduced into said chamber.